Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1-27. (Canceled).
- 28. (Previously presented) A chimeric Edg receptor selected from the group consisting of Edg l/3(ct), Edg 1/3(i3ct), Edg 1/3(i2i3ct), Edg 5/3(i3ct) and Edg 8/4(ct) comprising a portion of a first Edg receptor and a portion of a second Edg receptor, wherein the chimeric Edg receptor comprises:
 - (a) a non-contiguous replacement of at least one intracellular domain strand of a first Edg receptor;
 - (b) with a corresponding strand from a second Edg receptor.
- 29. (Previously presented) A nucleic acid encoding the chimeric Edg receptor of Claim 28.
- 30. (Previously presented) A cell comprising the chimeric Edg receptor of Claim 28.
- 31. (Previously presented) A cell comprising the nucleic acid of Claim 29.
- 32. (Previously presented) A method of screening for compounds that bind an Edg receptor comprising:
 - a) contacting the chimeric Edg receptor of claim 28 with a compound; and
 - b) detecting binding of the compound to the chimeric Edg receptor thereby identifying a compound that binds the first Edg receptor.
- 33. (Previously presented) A method of screening for compounds that modulate the activity of an Edg receptor comprising:

PATENT

Appl. No. 09/904,099 Amdt. dated May 31, 2005 Reply to Office Action dated January 7, 2005

7

- a) contacting the chimeric Edg receptor of claim 28 with a compound; and
 - b) detecting modulation of the activity of the chimeric Edg receptor relative to the activity of the chimeric Edg receptor in the absence of the compound,

thereby identifying a compound that modulates the activity of the chimeric Edg receptor.

- 34. (Previously presented) The method of claim 33, wherein the activity of the chimeric Edg receptor is increased.
- 35. (Previously presented) The method of claim 33, wherein the activity of the chimeric Edg receptor is decreased.
- 36. (Previously presented) The method of claim 33, wherein the activity of the chimeric G protein coupled receptor is detected by a calcium mobilization assay.
- 37. (Currently amended) The chimeric Edg receptor of claim 28, which couples with a Gαq protein comprising:
 - a) an extracellular domain of a first Edg receptor, wherein the first Edg receptor does not couple with a $\frac{G}{G}$ protein;
 - b) a transmembrane domain of the first Edg receptor, wherein the transmembrane domain is operably linked to the extracellular domain;

and

- c) a chimeric intracellular domain comprising an intracellular strand of a second Edg receptor, wherein the intracellular strand of the second Edg receptor couples with a Gaq Gaq protein, and the chimeric intracellular domain is operably linked to the transmembrane domain.
- 38. (Previously presented) A chimeric Edg receptor comprising:
 - a) an extracellular domain of a first Edg receptor;

Appl. No. 09/904,099 Amdt. dated May 31, 2005 Reply to Office Action dated January 7, 2005

b) a transmembrane domain of the first Edg receptor, wherein the transmembrane domain is operably linked to the extracellular domain;

and

1

c) a chimeric intracellular domain comprising a third intracellular loop and a carboxy terminal strand of a second Edg receptor,

wherein

the chimeric intracellular domain is operably linked to the transmembrane domain.

- 39. (Previously presented) The chimeric Edg receptor of claim 38, wherein the first Edg receptor is selected from the group consisting of Edg 1, Edg 5, Edg 6 and Edg 8.
- 40. (Previously presented) The chimeric Edg receptor of claim 38, wherein the second Edg receptor is selected from the group consisting of Edg 2, Edg 3, Edg 4 and Edg 7.
- 41. (Previously presented) A method of screening for compounds that bind an Edg receptor comprising:
 - a) contacting the chimeric Edg receptor of claim 37, 38, 39 or 40 with a compound;

and

- b) detecting binding of the compound to the chimeric Edg receptor thereby identifying a compound that binds the first Edg receptor.
- 42. (Previously presented) A method of screening for compounds that modulate the activity of an Edg receptor comprising:
 - a) contacting the chimeric Edg receptor of claim 37, 38, 39 or 40 with a compound;

and

b) detecting modulation of the activity of the chimeric Edg receptor relative to the activity of the chimeric Edg receptor in the absence of the compound,

PATENT

Appl. No. 09/904,099 Amdt. dated May 31, 2005 Reply to Office Action dated January 7, 2005

thereby identifying a compound that modulates the activity of the chimeric Edg receptor.

- 43. (Previously presented) The chimeric Edg receptor of claim 28, wherein second intracellular loop and the third intracellular loop of the first Edg receptor are replaced with the corresponding strands of the second Edg receptor.
- 44. (Previously presented) The chimeric Edg receptor of claim 28, wherein the second intracellular loop, the third intracellular loop, and the carboxy terminal strand of the first Edg receptor are replaced with the corresponding strands of the second Edg receptor.